Fig. 3

Fig. 4

Fig. 5

(21)

Fig. 7

Fig. 9

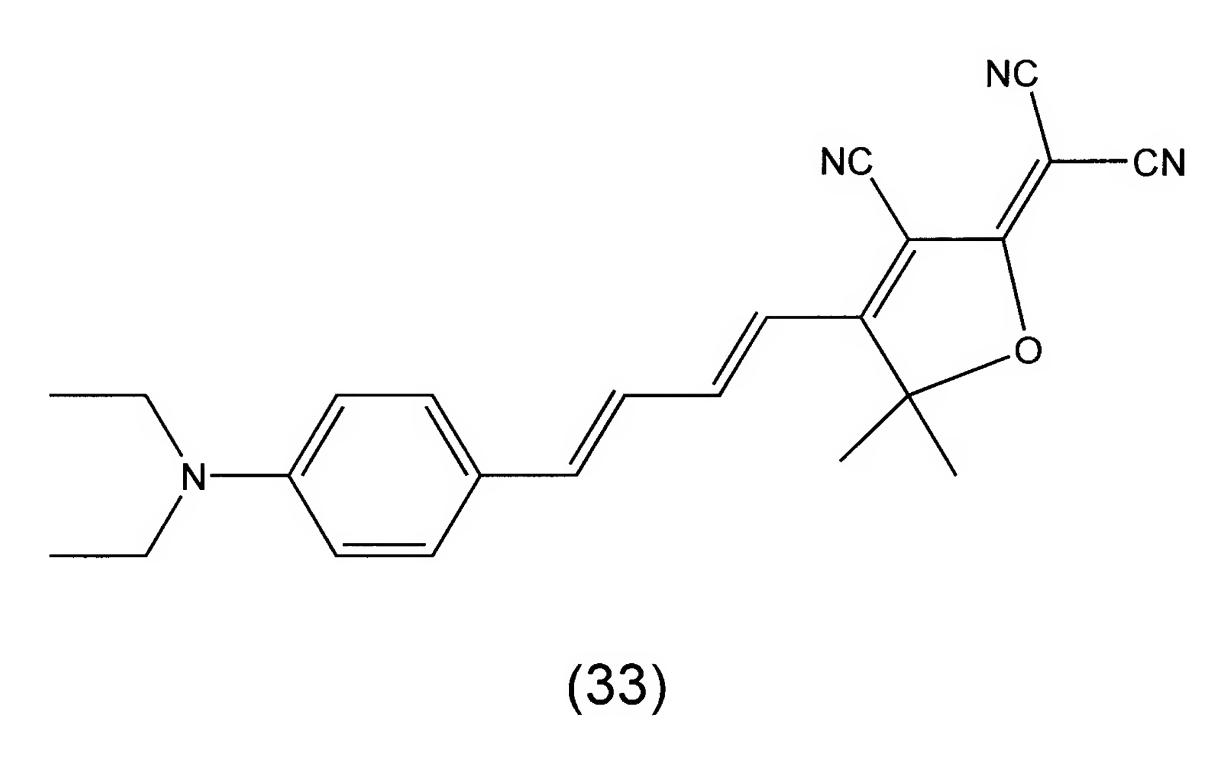
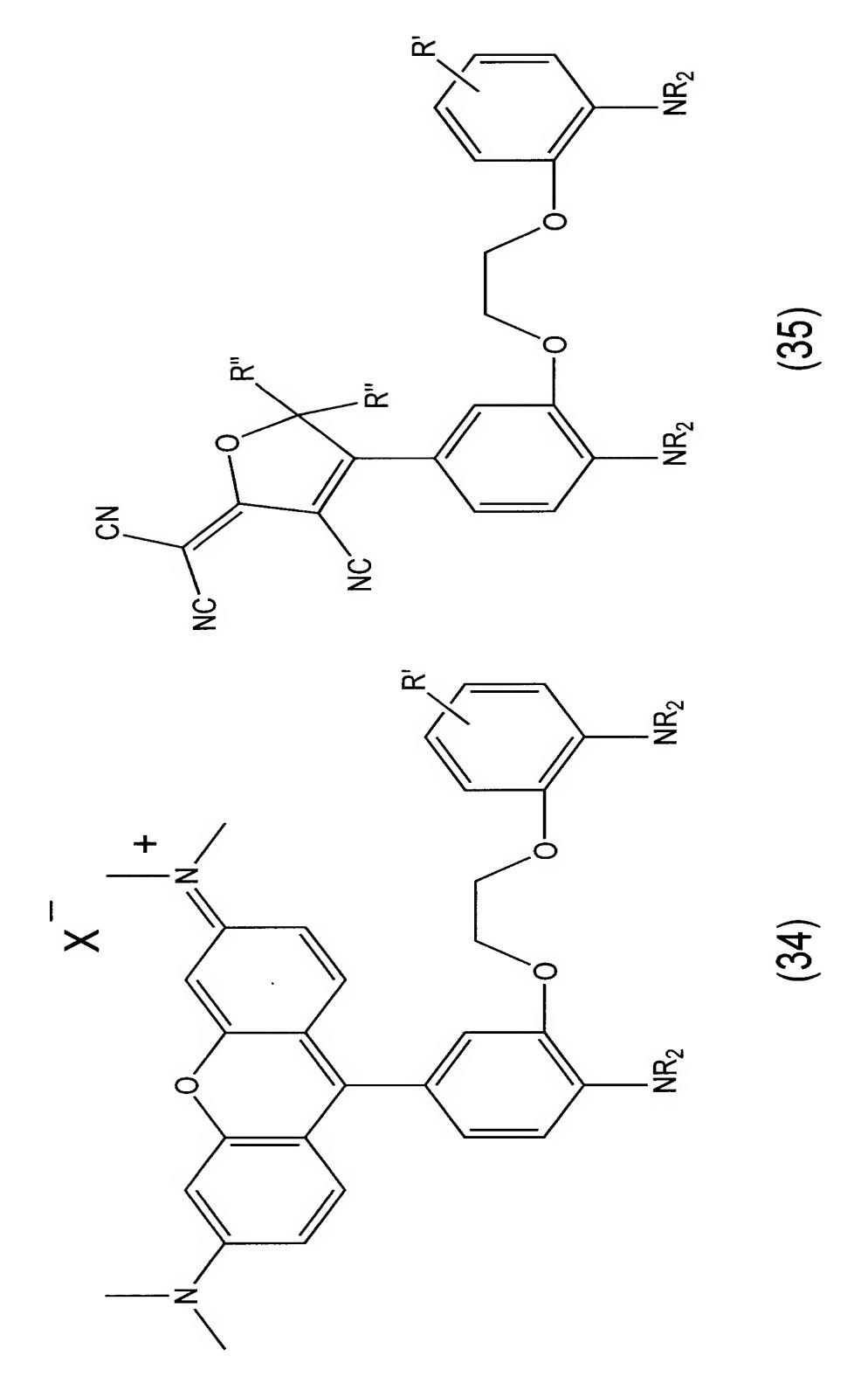


Fig. 11



Entry 1-11, DCDHF-R

Fig. 13

9

Fig. 14

$$F \longrightarrow MgBr \longrightarrow Mg, THF \qquad Br$$

$$OH \longrightarrow GF_3 \qquad OTMS \qquad TMSCN, \qquad CF_3 \qquad n-BuLi, THF \qquad CH_3 \qquad CH_3 \qquad CH_3 \qquad GH_3 \qquad GH$$

19a: $R_1 = R_2 = ethyl$

19b: $R_1 = R_2 = n-hexyl$

19c: $R_1 = R_2 = hexamethylene$

Entry 14: DCDHF-C6M-CF3

Entry 15: DCDHF-6-CF3

Entry 16: DCDHF-2-CF3

Fig. 15

Benzaldehyde used

Structures of the products

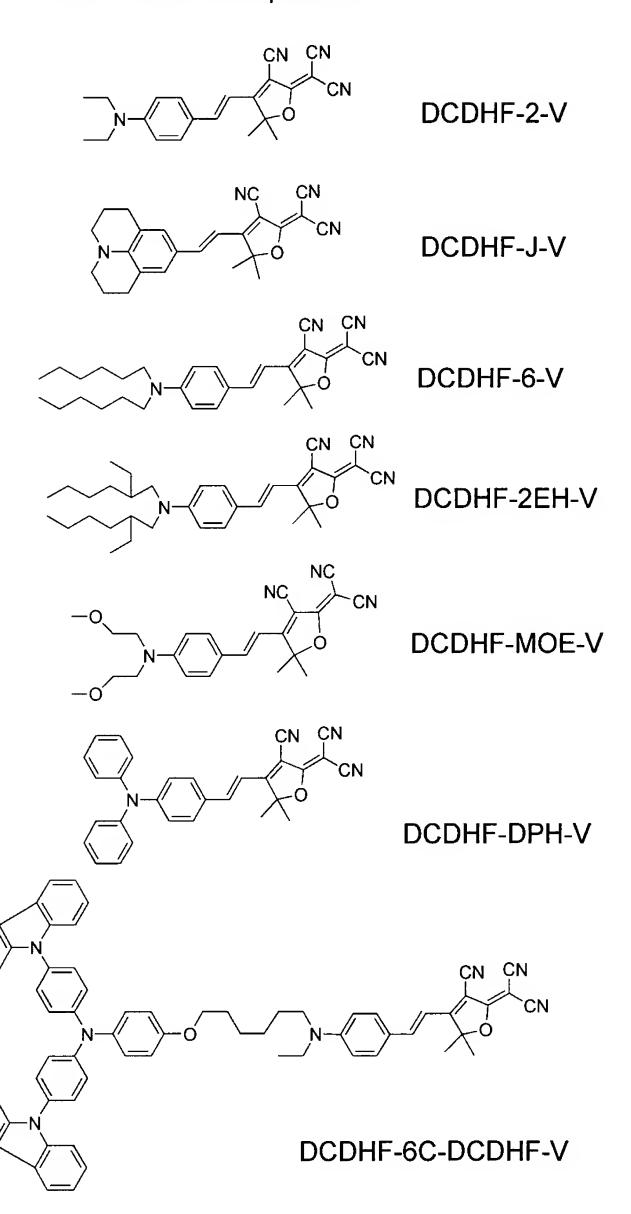
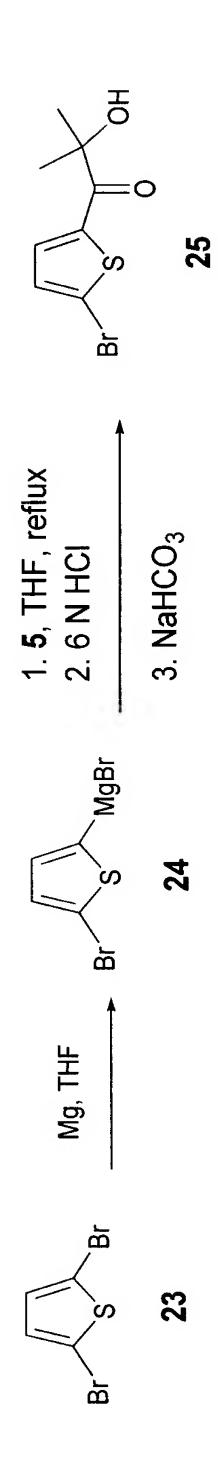


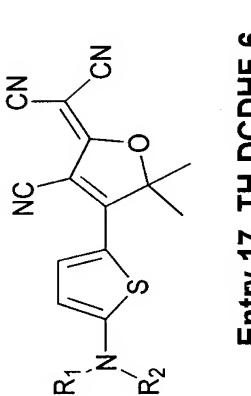
Fig. 16



Py, acetic acid

malononitrile,

26a:
$$R_1 = R_2 = n$$
-hexyl
26b: $R_1 = R_2 = hexamethylene$



Entry 17, TH-DCDHF-6 Entry 18, TH-DCDHF-C6M

21

30a: R = -C₆F₁₃ 30b: R = -C₆H₁₃ 30c: R = -COOC₁₂H₂

Entry 27: PFP-DDCDHF, R = -C₆F₁₃
Entry 28: HP-DDCDHF, R = -C₆H₁₃
Entry 29: DOCP-DDCDHF, R = -COOC₁₂H₂₅

$$R \longrightarrow HCI$$
 NMP, K_2CO_3

33a: R = *p*-OH 33b: R = *m*-OH 33c: R = H

Entry 30: P-DDCDHF

Entry 31: 2EHO-DDCDHF

Entry 32: M2EHO-DDCDHF

